AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A polymeric fluorescent substance adapted for emission of visible fluorescence in a solid state, said polymeric fluorescent substance comprising at least one type of repeating units represented by chemical formula (3-1) or (3-2):

(1) and said polymeric fluorescent substance having a number average molecular weight of 10³ to 10⁸ as determined using polystyrene as a standard:

$$\begin{bmatrix}
R^1 & R^2 & R^3 & R^4 \\
R^5 & X & X
\end{bmatrix}$$

$$\begin{bmatrix}
R^5 & X
\end{bmatrix}$$

$$\begin{bmatrix}
R^6 & X
\end{bmatrix}$$

$$\begin{bmatrix}
R^6 & X
\end{bmatrix}$$

$$\begin{bmatrix}
R^6 & X
\end{bmatrix}$$

wherein

Ar represents an arylene group having 6 to 60 carbon atoms involved in conjugation or a heterocyclic compound group having 4 to 60 carbon atoms involved in conjugation;

X, Y, and Z represent at least one group selected from the group consisting of an exygen atom, a sulfur atom, a carbonyl group, a group represented by C(R)₂, and a group represented by NR wherein, when X, Y, and Z contain a substituent R, said substituent R and R⁴ to R⁶ in chemical formula (1) each independently represent at least one group selected from the group consisting of a hydrogen atom, an alkyl group having 1 to 20 carbon atoms, an alkylthio group having 1 to 20 carbon atoms, an alkylsilyl group having 1 to 60 carbon atoms, an alkylamino group having 1 to 40 carbon atoms, an aryl group having 6 to 60 carbon atoms, an arylalkyl group having 7 to 60 carbon atoms, an arylalkoxy group having 7 to 60 carbon atoms, an arylalkoxy group having 7 to 60 carbon atoms, an arylalkoxy group having 7 to 60 carbon atoms, an arylamino group Serial No. 10/667,563

having 6 to 60 carbon atoms, a heterocylic compound group having 4 to 60 carbon atoms, a cyano group, a nitro group, and a halogen atom;

m is 0 (zero) or 1.

2. (currently amended) A process for producing the polymeric fluorescent substance according to claim 1, comprising the step of polymerizing a monomer represented by chemical formula (3-1) or (3-2) of claim 1 (2) alone, or polymerizing said monomer represented by chemical formula (3-1) or (3-2) of claim 1 (2) in combination with an aromatic compound having 6 to 60 carbon atoms involved in conjugation, or with a heterocyclic compound having 4 to 60 carbon atoms involved in conjugation.

wherein

A represents a hydrogen atom or a halogen atom; and

- X, Y, Z, and R₁ to R₆ are as defined in formula (1).

- 3. (canceled)
- 4. (original) An organic electroluminescent element comprising a pair of opposed electrodes, an anode and a cathode, and an organic compound layer interposed between said pair of opposed electrodes, said organic compound layer including a layer containing at least one type of polymeric fluorescent substance as defined in claim 1.
- 5. (original) The organic electroluminescent element according to claim 4, wherein a layer containing an electron transport compound is provided between said cathode and a luminescent layer.
- 6. (original) The organic electroluminescent element according to claim 4, wherein a layer containing a hole transport compound is provided between said anode and a luminescent layer.

7. (original) The organic electroluminescent element according to claim 4, wherein a layer containing an electron transport compound is provided between said cathode and a luminescent layer and a layer containing a hole transport compound is provided between said anode and said luminescent layer.